

## CLAIMS:

1. An adjustable mirror comprising:
  - a first fluid and a second fluid in contact over a meniscus extending transverse an optical axis, the fluids being substantially immiscible and having different indices of refraction;
- 5 - a reflective surface extending transverse the optical axis; and
- a meniscus adjuster arranged to controllably alter at least one of the shape and the position of the meniscus.
2. An adjustable mirror as claimed in claim 1, wherein said reflective surface is a
- 10 substantially planar surface.
3. An adjustable mirror as claimed in claim 1 or claim 2, wherein said meniscus adjuster is arranged to utilise the electrowetting effect to alter the shape of the meniscus.
- 15 4. An adjustable mirror as claimed in any one of the above claims, the mirror further comprising an aspherical lens element extending substantially transverse an optical axis.
5. An optical device comprising:
  - 20 - a first fluid and a second fluid in contact over a meniscus extending transverse an optical axis, the fluids being substantially immiscible and having different indices of refraction; a reflective surface extending transverse the optical axis; and
  - a meniscus adjuster arranged to controllably alter at least one of the shape and the position of the meniscus.
- 25 6. An optical device as claimed in claim 5, wherein the device is a lighting system for providing a directed beam of light, the device further comprising a light source arranged to emit electromagnetic radiation.

7. An optical device as claimed in claim 5, wherein the optical device comprises a laser cavity, the cavity including a second mirror.

8. An optical device as claimed in claim 7, wherein said second mirror is also an adjustable mirror.

9. A method of manufacturing an adjustable mirror, the method comprising the steps of:

- providing a first fluid and a second fluid in contact over a meniscus extending substantially transverse an optical axis, the fluids being substantially immiscible and having different indices of refraction;
- providing a reflective surface extending transverse the optical axis; and
- providing a meniscus adjuster arranged to alter at least one of the shape and the position of the meniscus.

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10. A method of operating an optical device, the optical device comprising:

- a first fluid and a second fluid in contact over a meniscus extending transverse an optical axis, the fluids being substantially immiscible and having different indices of refraction; a reflective surface extending transverse the optical axis;
- the method comprising controllably altering at least one of the shape and the position of the meniscus so that the mirror provides the desired reflective properties.

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